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TO BE PRINTED

Office-Supreme Court, U.S.
FILED
SEP 16 1982
ALEXANDER L. STEVAS
CLERK

No. 81-2159

IN THE SUPREME COURT OF THE UNITED STATES

October Term, 1981

BILL M. SILKWOOD, Administrator of the Estate of Karen G. Silkwood, Deceased,

Appellant,

v.

KERR-McGEE CORPORATION, a Delaware corporation, and KERR-McGEE NUCLEAR CORPORATION, a Delaware corporation,

Appellees.

On Appeal from the United States Court of Appeals for the Tenth Circuit

BRIEF IN OPPOSITION TO APPELLEES' MOTION TO DISMISS OR AFFIRM

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INTRODUCTION

The Appellant, Bill M. Silkwood, Administrator of the Estate of Karen G. Silkwood, deceased, respectfully submits this Brief in Opposition to the Appellee's Motion to Dismiss or Affirm.

In this Motion, Appellees have suggested to this Court that Appellant has given the Court a slanted, unsupported and misleading version of the facts of the case. Appellees would have this Court believe that there was no factual basis whatever for the jury's award of $10 million punitive damages.

Appellees further suggest to this Court in their Motion to Dismiss that this Court lacks appellate jurisdiction over this appeal because Appellant has failed to demonstrate that the Tenth Circuit considered Oklahoma's punitive damages statute when it ruled that the jury's $10 million punitive award was absolutely preempted.

Appellees ask this Court to summarily affirm the judgment below, claiming that it was correct, supported by other grounds and involves too insubstantial an issue to warrant this Court's consideration on the merits.

As demonstrated below, Appellee's varied contentions range from dubious to frivolous. There was a substantial, indeed compelling, evidentiary basis for the jury's $10 million punitive damages verdict. This appeal does come within this Court's appellate jurisdiction. The Tenth Circuit preempted

the jury's punitive damages verdict on grounds that any award of punitive damages would substantially compete with regulation of commission--thus holding Oklahoma's punitive damage statute, which authorizes punitive damages, to be repugnant to the Atomic Energy Act.

Moreover, the far-reaching implications of the Tenth Circuit's decree of absolutely immunity to punitive damages for nuclear facilities, and the Circuit's departure from the preemption standards established by this Court, demand full consideration of the issues on the merit by this Court.

That the Tenth Circuit's opinion presents substantial and serious disruptions to the allocations of authorities between the federal and state governments is indicated by the thirteen states which have urged this Court as amici curiae to note jurisdiction over this appeal and reverse the Tenth Circuit's ruling.

Because the Tenth Circuit unquestionably held the state statute of Oklahoma authorizing punitive damages to be repugnant to the Atomic Energy Act, this case falls within this Court's appellate jurisdiction. Consequently, this Court is faced with the choice of summarily affirming this highly questionable decision and making it the binding law of the land--despite the protestations of at least 13 states--or it must note probable jurisdiction and review the Tenth Circuit's opinion on the merits. This is simply not the kind of case for which summary affirmance is appropriate. It is inconceivable

that this Court would adopt, without full review, such a broad-sweeping deprivation of the rights of citizens of virtually every state to the protections of their state's punitive damages laws with regard to egregious, grossly-negligent or even intentional misconduct by operators of nuclear facilities.

I. STATEMENT OF FACTS

Appellees have suggested to this Court that Appellant's Statement of Facts is "slanted," "unsupported" and misleading. Appellees further claim that the record is devoid of evidence which would justify punitive damages.

Appellees' contentions are disingenuous, to say the least. Although the jurisdictional statement's factual statement was not, due to space restrictions, fully annotated, Appellant provided detailed references to the record in the Brief to the Tenth Circuit. So that this Court can see that Appellant's Statement of Facts was neither slanted nor unsupported, the Statement of Facts from one Tenth Circuit Brief and portions of the Brief detailing the evidence of Appellee's gross negligence, willful disregard and actual malice are attached as appendices to this Brief. As these discussions and the portions of the record cited within them demonstrate, there was abundant, indeed compelling, evidence of Appellees' gross negligence, reckless disregard for the safety of Karen Silkwood, other employees and the public at large, and of Appellees' actual malice toward Karen Silkwood.

Also attached as an appendix are all of the excerpts of James Keppler's testimony included in the Appendix by Appellee as well as by Appellant.

Appellees point to a concession by Appellant's counsel that we could not prove precisely how Karen Silkwood's contamination occurred (Motion at 4) as the prelude to asserting that "Having failed to prove how the exposures occurred, it is axiomatic that they were not proven to be the product of malice." (Motion at 4)

The only problem with this statement is that Appellees conveniently ignore the fact that the jury expressly found that Karen Silkwood's contamination was proximately caused by Appellees' negligence and also found that punitive damages--requiring gross negligence and a reckless disregard for the rights of others and/or actual malice--were warranted.

The Tenth Circuit's opinion did not indicate in any way that the jury's punitive damages judgment lacked the requisite evidentiary support, nor could it. The opinion concluded that no punitive damage award could be allowed--no matter how reckless or egregious the conduct--because a punitive damage award would be repugnant to the federal regulatory scheme.

As the record citations in the appendix demonstrate, there was ample evidence of reckless disregard for the rights of Karen Silkwood and her co-workers and for the public to support a punitive damages verdict. Appellees' statements about their regard for Karen Silkwood and about their physical

security system are greatly contradicted by the evidence cited in the appendix. The jury heard Appellees' contentions and their evidence and, confronted with contradictory facts, found against Appellees on these issues.

II. APPELLATE JURISDICTION

Appellees argue that this appeal should be dismissed because the opinion below did not, in so many words, hold a state statute to be "invalid as repugnant to the Constitution treaties or laws of the United States," as required by 28 U.S.C. §1254(2).

Appellees concede (Motion at 2) that the Court below held that a judicial award of exemplary damages under state law was preempted. They contend that the requirements of 28 U.S.C. §1254(2) were not satisfied because the opinion below made no specific mention of the specific state statute invalidated, i.e., 23 O.S. §9, and that Appellant failed to demonstrate any consideration of the Oklahoma statute by the Tenth Circuit. This argument verges on the frivolous.

In Oklahoma, punitive damages are statutory. They can only be awarded if the statutory requirements of 23 O.S. §9, as clarified by case law, are met. If the legal requisites are met, it is reversible error, under Oklahoma law, for a trial judge to refuse to submit punitive damanges for the jury's consideration. State, ex rel, Pollution, etc. v. Kerr McGee Corporation, 619 P.2d 858 (Ok. 1980); Oller v. Hicks, 441 P.2d 356 (Ok. 1967); Sopkin v. Premier Pontiac, Inc., 539 P.2d 1393 (Ok. App. 1975).

As noted, the Court below did not dispute the adequacy of the evidence for punitive damages. Nor did it find fault with the trial court's jury instructions respecting punitive damages. The sole basis for the appellate court setting aside the jury's $10 million punitive damages verdict was its conclusion that a punitive damages award under state law would substantially compete with the federal regulation of nuclear facilities established by Congress in the Atomic Energy Act, 42 U.S.C. §2011, et seq. The decision totally forecloses punitive damages against nuclear facilities because of the perceived repugnancy of such a state law-based award to the Atomic Energy Act and federal regulatory program. If that is not a determination that a state law is repugnant to a federal law, no preemption decisions are.

Since the punitive damages awarded were authorized by and returned in accordance with Oklahoma's punitive damages statute, the Court below necessarily found the authorizing statute, as applied to nuclear facilities, to be preempted when it found the jury's punitive verdict preempted. Prior decisions of this Court have made clear that a decision holding a statute pre-empted as applied falls within the appellate jurisdiction of this Court. The fact that the Tenth Circuit's opinion does not explicitly mention 23 O.S. §9 as the statute whose application it held preempted cannot operate to place the Circuit's decision outside the appellate jurisdiction of this Court.

It is also misleading in the extreme for Appellees to suggest that the Tenth Circuit did not consider the statute and the preemption issue. Appellant briefed the issue of the preemption standard for pre-existing tort remedies at length, and presented the statutory basis for punitive damages at page 2 of our Appellate Brief.

It is ironic that Appellees seek to avoid an appeal by the absence of a discussion of the statute in the court's opinion.

There was no discussion of the absolute preemption of the statutory authorization of punitives because such an extreme position was not claimed by Appellants or contemplated as a court ruling in their wildest dreams.

III. MOTION TO AFFIRM

In their Motion, Appellees ask the Court to summarily affirm the holding of the Tenth Circuit on both federal and non-federal grounds. As to the federal grounds, Appellees assert that the Court below correctly held the imposition of punitive damages preempted and that the opinion did not deprive citizens of any common law or Constitutional rights.

Appellees also urge the Court to avoid exercising its plenary power since the underlying basis for punitives--the personal injury award--was eliminated by the appellate court when Workers' Compensation was held to be the exclusive remedy. Apparently, Appellees argue that although the $5,000 award of property damages will support punitive damages, that

amount is so small and the amount of punitives which this award will support so insubstantial that "any federal question presented is not substantial." (Motion, page 18)

For non-federal grounds, Appellees argue that since compliance with relevant Atomic Energy Commission regulations precludes the award of punitive damages and punitive damages may not be awarded without evidence of malice or wanton conduct, the Court should summarily affirm the decision below.

None of Appellees' arguments justifies a summary affirmance of the Tenth Circuit's highly controversial decision without full consideration by this Court. The federal questions presented by the decision are by no means insubstantial.

At least 13 states perceive the decision as a legally unsound and disturbing usurpation of state powers, a nullification of important state and citizen rights and a dangerous extension of federal preemption. Also, as noted below, the Appellees' arguments against exercise of plenary power rest on certain untrue factual and legal premises and omit several significant points.

A. Exercise of Plenary Power

Appellees assert that the holding and impact of the decision below have been distorted and that this appeal "seeks an unwarranted disruption in the orderly, and hereto consistent, growth of the law surrounding federal regulation of radiation hazards." (Motion at 9)

Although Appellees would imply that the Tenth Circuit's opinion merely followed the orderly and consistent pattern of the law which preceded it, the decision is, in fact, a radical departure from previously established preemption standards and parameters. In fact, the decision went far beyond what even the Appellees had argued for before the Circuit. Both Appellees and the nuclear industry's trade association, the Atomic Industrial Forum, in an amicus brief, did not claim that punitive damages were absolutely preempted--only that they were preempted where substantial compliance with applicable federal regulations was proven.* (See Appellee's Brief to the Tenth Circuit at 40-48; Atomic Industrial Forum's Amicus Brief at 25.)

Appellees argue that the Court's plenary power--the entertainment of briefs and argument--should not be exercised by the Court since the court below was "merely following sound established legal precedent of this Court and the lower federal courts." (Motion, page 9) Perhaps the most eloquent rejoinder to this placid scene painted by Appellees is the response of 12 sovereign states who are urging the Court to exercise its power to correct this "uncharted expansion of preemption beyon

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*Of course, Appellees' argument failed to address the fact that the jury had been presented with evidence that Appellees had in fact not substantially complied with all applicable regulations and the fact that the jury was instructed that substantial compliance with regulations, if found, would be entitled to the strongest and possibly conclusive consideration by the jury as negativing, or proving lack of, bad conduct necessary for an award of punitive damages.

its present contours [which] could seriously upset the carefully maintained balance in federal-state relations reflected in contemporary preemption doctrine." (Amicus Brief, page 2)* Indeed, there is trouble in Appellees' paradise: This is the first case to award punitive damages in a nuclear tort and the first to preempt such damages; it establishes a per se bar to punitives in nuclear torts regardless of intentional or criminal conduct without any expression of any Congressional intent for such a result and in the fact of Congressional pronouncements that state tort law is to control; it holds punitives are unavailable for an Extraordinary Nuclear Occurrence under the Price-Anderson Act procedures, again without any basis for the legislative history; it extends the moribund Northern States doctrine and establishes a wholly unprecedented novel preemption test; and it ignores the clear Constitutional impact of Duke Power Co. v. Carolina Environmental Study Group, Inc., 438 U.S. 59 (1970).

Far from "simply" holding punitive damages preempted (Motion, page 9), the opinion raises serious public policy, jurisdictional and legal questions which deserve this Court's full review.

Given the precedental, binding national effect of a summary affirmance of the decision below, the Court should not

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*Nevada, New York, Ohio, Alaska, Arizona, Hawaii, Louisiana, Maine, Massachusetts, New Jersey, New Mexico and South Carolina have joined in an amicus brief urging this Court to accept jurisdiction and to reverse the Tenth Circuit's decision. Minnesota filed a seperate brief urging the same result.

grant this opinion its imprimatur without collectively and fully considering the implications of this holding on the rights of citizens and the states themselves, and the inconsistencies of the decision with other decisions of this Court.

B. Substantial Federal Question

Appellees argue that the federal questions presented by this appeal are not substantial because the Tenth Circuit overturned the $500,000 personal injury verdict and left undisturbed only the $5,000 portion of the verdict awarded for the property damage caused by the contamination.

There are several serious flaws in Appellees' argument.

The significance of the federal question raised by the Tenth Circuit's decision is not determined by the amount of punitive damages to which Appellant might conceivably be entitled. The court below held that any award of punitive damages is preempted--a far-reaching pronouncement which affects citizens, states and nuclear facilities across the Country, no matter how much money Appellant stands to individually receive or lose from punitive damages.

Appellees' suggestion that the underlying bases for a punitive damage award no longer exists (Motion at 18) is, simply, untrue.

The jury found Appellees to have engaged in a reckless and willful disregard for the rights of others--a determination unaltered by the Tenth Circuit. The evidence of Appellees' recklessness and disregard for the rights and

safety of others was equally applicable to the $5,000 property damage as to the personal injuries which the jury determined to be $500,000. Even the $5,000 property damages will support punitive damages in a not unsubstantial amount.*

Additionally, the question of Appellees' liability for the personal injuries suffered by Karen Silkwood is by no means finally resolved, as suggested in Appellant's Jurisdictional Statement at page 6, note 5.

Under Oklahoma law, an employee who is intentionally or willfully injured by his or her employer is entitled to sue for such injuries in a common law action as if the Workers' Compensation Law did not exist. Hull v. Wolfe, 393 P.2d 491, 493 (Ok. 1964).

The trial court limited the introduction of evidence by Appellant which would go to establishing an intentional or willful contamination by Appellees because of the court's ruling that the case was not subject to the Workers' Compensation courts and because Appellant also had theories of negligence and gross negligence. As one example, the court

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*Appellees' assertion that a 20-to-1 ratio between the actual damages and the punitive damages awarded by the jury was per se excessive was rejected in the trial court's opinion [see, Silkwood v. Kerr McGee Corp., 485 F.Supp. 566, 589-591 (1979)] and not reached by the Tenth Circuit. Appellees' ratio argument has been expressly rejected by the Oklahoma Courts--see, Timmons v. Royal Globe Ins. Co., 53 OBAJ 1898 (Ok. August 7, 1982)--upholding a punitive award 44 times an actual award. Thus, using Appellees' own peculiar legal calculus, a punitive damage award of at least $220,000 with actual damage of $5,000 would not be per se excessive.

limited evidence as to anti-union attitudes by Appellees' plant manager. See tr. 7624. Appellant's trial strategies, evidence, jury arguments and requested instructions were all formulated and presented in reliance on the court's rulings. See, e.g., tr. 10,641.

If the jury's determinations are not sufficient by themselves to establish an entitlement to recovery on a Hull v. Wolfe type of common law cause of action, Appellant may still be entitled to a new trial on the issue of an intentional or willful contamination. The trial court recognized that there was a common law right of action for an intentional contamination. See tr. 1068.

Thus, the issue of Appellant's entitlement to punitive damages is by no means moot. There is an actual damage award as well as a jury determination that Appellant had the degree of culpability necessary for a large punitive damage award, and the trial court concurred when it refused to set aside or alter the jury's verdict. See, 485 F.Supp. at 591.

C. Non-Federal Grounds

In offering alternate grounds, admittedly inarticulated by the appellate court, for the Court to summarily affirm the opinion below, Appellees simply misstate Oklahoma law. Oklahoma law has never acknowledged the "compliance" defense asserted by Appellees. As to negligence, Oklahoma follows the almost universal rule that compliance with statutory or

administrative requirements does not preclude a finding of negligence, but is merely evidence of use of due care. Transport Indemnity Company v. Page, 406 P.2d 980 (Ok. 1965); McBroom v. Mayer, 303 P.2d 303 (Ok. 1956); Kansas O.&G. Ry. Co. v. Clark, 262 P. 426 (Ok. 1903). Where the common law standard of due care greatly exceeds the administrative minimum, as here, Oklahoma law would not bar punitives where conscious indifference to the consequences of an act or reckless disregard of the rights of the injured was demonstrated.

Appellees stake their argument that punitives are precluded on their contention that "The record is clear that Kerr McGee was in compliance with AEC regulations as they related to Silkwood's alleged injury and property damage." Motion at 20.

The record by no means clearly indicates that Kerr McGee was in compliance as is illustrated by the material excerpted from Appellant's Brief to the Tenth Circuit included in Appendix C attached.

Contrary evidence was offered which indicated that Appellees had, in fact, violated various standards directly applicable to Silkwood's injuries. The jury found against Appellees and their determination had an adequate evidentiary basis as the discussion in Appendix C reveals. On appeal, the jury's resolution of the evidentiary conflict against Appellees must be respected. The Tenth Circuit, like other

courts across the Country, has repeatedly held that the jury is the exclusive judge of the credibility of witnesses and the weight to be given particular pieces of evidence, Boehm v. Fox, 473 F.2d 445 (10th Cir. 1979), especially with regard to experts. Swearngin v. Sears Roebuck & Co., 376 F.2d 637, 643 (10th Cir. 1967). On appeal, the evidence must be viewed in the light most favorable to the party which prevailed at trial, along with all inferences that may reasonably be drawn from such evidence. Ahearn v. Veterans Administration, 537 F.2d 1098, 1100 (10th Cir. 1976).

In short, despite Appellees' efforts to retry their case, this Court must accept the fact that Appellees were not in compliance with all applicable regulations, and consider Appellees' amenability to punitive damages accordingly.

Oklahoma law also does not require "proof of evil intent" before punitives may be awarded. Motion at page 21. Rather, evil intent may be inferred from wanton conduct. Foster v. Emery, 495 P.2d 390, 392 (Ok. 1972); McCorkle v. Great Atlantic Ins. Co., 637 P.2d 583, 586 (Ok. 1981). Wanton conduct is conduct which exhibits a conscious indifference to consequences in circumstances where the probability of harm is readily apparent. Foster v. Emery, supra; Barrall Food Stores, Inc. v. Bennett, 153 P.2d 106, 110 (Ok. 1944).

Thus, punitive damages under Oklahoma's statute may be awarded where there has been a reckless and wanton disregard of another's rights. Misco Leasing Inc. v. Keller, 490 F.2d

545, 549 (10th Cir. 1974). Tomlinson v. Bailey, 289 P.2d 384, 385 (Ok. 1954).

Appellees' final contention--that there was no evidence of malice or wanton conduct--is as invalid as its description of the applicable law.

As both the jury and the reviewing trial court found, there was ample evidence of reckless and wanton conduct along with evidence of actual malice directed toward Karen Silkwood. This evidence is discussed in Appendix B attached. The fact that Appellant conceded an inability to explain the precise mechanism by which Ms. Silkwood's contamination occurred is by no means the same as conceding an inability to prove that Appellees caused the injury. Appellee chooses simply to ignore the jury's finding that Appellees' gross negligence was indeed the proximate cause of Karen Silkwood's personal injuries and property damage, a finding which this Court must respect.

IV. CONCLUSION

Despite Appellees' efforts to muddy the waters, the discussion above demonstrates that there was a solid evidentiary and legal basis for the jury's $10 million punitive damage verdict against Appellees.

This verdict which was rendered by a conscientious jury after an 11-week trial was nullified by a Circuit Court decision which attempted to re-weigh evidence and which created new law regarding the burden of proof and Workers' Compensation

jurisdiction and the preemption of a statutorily-authorized tort remedy.

The Tenth Circuit's expansion of preemption and its unconcern at the lack of any expressed Congressional intent that punitive damages be preempted make its decision a dangerous precedent unjusitifed by the preemption standards previously laid down by this Court. The decision is unjust not only to Appellant but to states and their citizens across the Country who stand to lose the protections of state punitive damage laws against reckless and wanton conduct by nuclear facilities.

Thirteen states across the Country have joined with Appellant in urging this Court to note jurisdiction and reverse the Tenth Circuit's ruling. Obviously, the appeal presents substantial federal questions which fall within this Court's appellate jurisdiction and which call for exercise of this Court's plenary powers.

Appellant respectfully urges that this Court note probable jurisdiction and set this case for briefs on the merits and oral arguments.

Respectfully submitted,

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STATEMENT OF FACTS

Background

As part of its broad involvement in mining, milling, and manufacturing of fuels for the nuclear industry, KM operated a plant some 30 miles north of Oklahoma City called the Cimmarron Facility. The facility contained uranium and plutonium fuel fabrication plants located in adjacent buildings and jointly administered by a manager and associated staff, Dx 141, R. v. 19.

The facility was licensed and periodically inspected by Atomic Energy Commission (AEC - now the NRC) inspectors. KM's license and AEC regulations imposed operational requirements which represented minimum standards and not a full assurance of safety, tr 8152, 8221-2, 8245. The AEC expected the licensee to exercise care beyond AEC's requirements if more was demanded by reasonable prudence, tr 8221. Ex-KM employees said KM knew when "unannounced" AEC inspections were coming and "cleaned things up," in anticipation, tr 1708, 2297, 1389, 3154.[1]

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[1] AEC requirements are discussed, where applicable, in the body of this brief. KM asserts its "substantial" compliance with AEC regs as a liability shield. The evidence was, however, that KM was not even in "substantial" compliance; it violated AEC requirements at least 75 times, tr 8176, and violated AEC requirements pertinent to Ms. Silkwood's exposure specifically (see p. 98). AEC Regional Director Keppler, KM's own witness, gave the plant a "C" on its performance, tr 8199 -- "I could see no evidence that Kerr-McGee management was on top of the operation," tr 8218, Px 154, R. v. 13. Plaintiff's expert, world-renowned health and safety leader Dr. Karl Morgan, for 25 years with the AEC's Oak Ridge facility, gave the plant an "F" on its performance (tr 1568-9) and referred to a callous and hardened disregard for safety by KM's management.

Karen Silkwood was employed as a laboratory analyst at this plutonium plant from August, 1972 until her death on November 13, 1974. Plutonium was utilized in the production process in various physical forms. Plutonium is a man-made, radioactive element used in nuclear weapons and fuels. It is explosive, flammable, toxic and a highly potent carcinogen, (as KM recognized, tr 4967, 9385) rendering it ultra-hazardous and activities involving its handling, abnormally dangerous, e.g. tr 766-77, 932, 935-42, 978, 1555-7, 1560, inst. 7, 9. It is measured in units of weight and energy[2] that reflect its high toxicity in even microscopic amounts.[3]

KM recognized that because of its hazards,[4] the plutonium entrusted to it had to be "absolutely contained," tr 4502, 4736, 7660.

KM's containment of the ultrahazardous plutonium entrusted to its custody was far from "absolute": between 1971 and 1975 KM's employees were exposed to the harmful radiation in some 574 separate contamination incidents, (Px 28, passim, R. v. 11). KM's physical security system permitted "biologically significant" quantities of plutonium to escape undetected, and in October of 1974, over 30,000 grams of plutonium could not be accounted for by KM's inventory and "accountability" system, (tr 7964).

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[2] Weight is measured in grams (1/30 oz); biologically significant qualities typically in nanograms (a billionth of a gram) or picograms (a trillionth of a gram). Energy is measured in curies, Ci, or corresponding fractional equivalents, nCi and pCi, tr 822, 1050, 1042, cf Amic. Br.5.

[3] The nature and extent of the biological harms caused by plutonium are extensively discussed in the testimony of Drs. Gofman and Martell see e.g. tr. 724-33, 735-9, 742-7, 750-63, 919-23. The extraordinary qualifications of these two experts as well as of plaintiff's other expert, Dr. Karl Morgan, are set out in their resumes, Px 1 (a), 1 (b), & 1 (c), R.v. 9.

Workers at KM's plant were represented by a local of the Oil, Chemical and Atomic Workers (OCAW) Union., which Karen had joined soon after she began work at the plant.[5] Karen increasingly became concerned about health and safety problems at the plant and the lax attitude of KM toward these problems, tr 1977, 2290, 3213. In August, 1979, she was elected as one of the three members of the union negotiating team, with responsibility for health and safety matters in particular, tr 7761-2. In September, 1974, the three committee members (Silkwood, Tice and Brewer) travelled to Washington, D.C., met with OCAW leaders, and the next day presented charges of numerous dangerous health and safety violations to AEC staff members, tr 3123-5, 3148-53, Px 63-A, R.v. 13.

Footnotes continued from preceding page

[4] As KM recognized, the most serious risk was that of inhalation, (e.g. tr 5763, 617). Once inside the body, even microscopic quantities of plutonium continuously emit thousands of powerful "alpha" particles per minute which inflict serious and irreversible damage to cells, producing genetic damage and mutations that make cells cancerous. See citations in note 3, supra, also 54 1721-2. The biological hazards from alpha particles have long been recognized, see tr 938-9, 1728-30, 1759-60.

[5] Although certain KM officers denied it, KM management was strongly anti-union, tr 3127. It had "crushed" an OCAW strike at the plant in 1973, using newly hired, untrained employees to (dangerously) maintain production during the strike, tr 3127, 3196-7, 7808, 7760,6580. Px 285, R.v. 13. Facility manager Moore had urged employees to vote to decertify the union (tr 7757-62, Px 182, 183, R.v. 13) and had been comended by KM top management for his handling of the strike, tr 7760-1. KM repeatedly blamed the union for its own deficiencies. See e.g. tr 7519-2, 7601-5.

[6] The three OCAW committee leaders, as well as other union members (e.g. tr 2299, 2302-6, 2654), were all subjected to retaliation. Brewer was punitively reassigned to an undesirable work location called the "rockpile", fired, and was later re-hired by NLRB arbitration, tr 1272-3; Tice was likewise relegated to the rockpile, Id. Karen Silkwood was similarly reassigned to the rockpile, tr 7685-89, 7698, Px 291, R.v. 13, blamed for her contamination, tr 7589-91, 6268, 6298, 7676, 3939, 3753, 7710, Px 226, R.v. 13, and pressure was put on her immediate supervisor to discredit her, tr 1267. In reply to a question by KM's counsel as to what possible motive KM might have for contaminating Ms. Silkwood's apartment, Mazzochi replied: to justify a search of her apartment and to undermine her credibility, tr 3264-6, 3238-9.

The AEC required documentation of the charges and Karen was assigned by OCAW leaders Wodka and Mazzochi the job of collecting documentaion for the allegations, while maintaining a low profile, tr 3136-7, 3217, 3239.

KM management was aware of the trip to Washington (tr 1266, 3220, 8472, 6577-8, 8504-5, 3728), and it was widely known that Karen was collecting damaging information at the plant in September and October, tr 2291-2, 8510-11, 6954-5, 7678.

Karen had also told the OCAW that there was evidence that X-rays of the fuel rods KM was fabricating were being illegally falsified or altered[7] (tr 3123-45, 3312), and a plan was devised where the evidence of this and the health and safety dangers would be turned over to New York Times reporter David Burnham, tr 3136.[8] Wodka and Mazzochi stressed to Karen that the charges of improprieties had to be documented (tr 3216-17) and were confident that Karen was documenting them, tr 3217, 3239, 3242-4. Karen collected information and recorded some of it in notebooks (Px 120A, 276, R.v.13, tr 3137, 3156, 3743) -- and relayed some of the information collected in phone conversations with Wodka which were recorded with her permission, Px 131, R.v. 13, tr 3138.

Footnote continued from preceding page.

[6] continued. Together this evidence was pertinent to KM's actual malice toward Ms.Silkwood and the unlikelihood of KM's claim that it was Karen who contaminated her apartment.

[7] The alleged falsification was of particular concern because of the danger that use of faulty fuel rods in the breeder reactor could potentially produce " a disaster of untold magnitude" tr 3207.

[8] OCAW leaders Mozzochi and Wodka candidly acknowledged that they hoped to use revelations of KM's health and safety improprieties and falsification of fuel rod documentation to bolster OCAW bargaining leverage and to defeat the effort to decertify the union.

Against this background, Karen Silkwood was contaminated on November 5, 6, and 7, 1974 by plutonium that had escaped from KM's custody. Her apartment was severely contaminated and had to be torn down and virtually all her possessions sealed up in 55-gallon containers and removed. The level of internal contamination of her body was established by competent expert testimony as having immediately inflicted serious bodily harm,[9] and producing severe mental anguish and emotional distress (related by at least seven witnesses -- Wodka, Jung, Smith, Moore, Sternhagen, Rosemary Porter, Merle Silkwood) before her auto accident death on November 13th.

Contamination Details[10]

NOV. 5

On November 5, 1974, Karen Silkwood reported early for work at Cimarron facility. After working for a number of hours, she detected contamination on her hands, Px 37,p.7, R. v. 18. KM health physics technicians were summoned. She was put on a 5-day bioassay collection program, and a bioassay kit was prepared by a technician and left on a hall shelf with her name and badge number on it.

Footnote continued from preceding page

[8] continued As part of the same effort they brought experts to the plant to lecture on plutonium's dangers. The lectures which were recorded - Px 132/1,2,3, & 4 - were attended by Ms. Silkwood and other KM employees.

[9] The nature of the bodily harm is detailed in the injury section, infra. pp. 74-77.

[10] The contamination details are described in KM's contamination incident report, Dx 27, R.v. 18, of 12/13/74, and the AEC's inspection report, Dx 37, R.v. 18, in tr 3743-53, and in the testimony of various KM employees, (Fine, Ford, Norwood).

Karen was scrubbed down and thoroughly decontaminated by a KM technician (tr 3472, 3568, 4987, 6064-5, 3494-6); before she left work in the early morning of November 6, she had no detectable contamination on her body, Px 272, R.v. 13, tr 3564, 4987, 6064-5.

KM employees and later AEC investigators tested the glove box gloves and found no leaks. They found no airborne contamination or other possible source of the contamination at the plant. See Dx 37, p. 8, app. A, R.v. 18.[11]

NOV. 6

On November 6, Karen worked the day shift so she could participate in union negotiations. She arrived early for her shift and worked in the lab on paperwork, but did not work in the glove boxes (which contained plutonium), tr 4692. Upon leaving her lab to attend a union meeting, she detected contamination on her right forearm, Dx 37, R.v. 18. Decontamination efforts with soap and water revealed the contamination to be "fixed" (tr 3534), so she was permitted to attend the union negotiating session, upon the stipulation that she would thereafter come back for completion of the decontamination, Id. tr 3533. During the union meeting, Karen confronted the facility manager with the fact that she was contaminated and that the company was doing nothing about it, tr 7708.

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[11] Although KM's communication to the AEC mentioned an alleged puncture in a glove box glove, Px 226, R.v. 13, p. 1, the ultimate conclusion of KM personnel on the scene, KM's Health and Safety Manager, the facility Manager and the AEC's investigation was that the November 5 contamination did not occur at the plant. Tr 3481-2, 3643-4, 3647, Px 199, R.v. 13, Px 20, R.v. 9, tr 4712, 7710-11 Dx 37, p. 1, R.v. 18.

Following the meeting, Karen reported back for further decontamination as directed. A nasal smear revealed plutonium in her nostrils which "did not seem possible", in the light of her lack of contact with plutonium that day, Dx 37, R.v. 18, tr 3536. Karen expressed her belief that plutonium was in her lungs and "working back out her nose"; since this "did not seem plausible", she was asked to report to the health physics office the first thing the next morning for further nasal smears. Id. At Karen's request, her locker at work and car were surveyed as possible contamination sources, but no contamination was found, tr 3542. She was successfully decontaminated before she was sent home, tr 3534.[12] She was very upset at the high nasal smear,[13] and began to cry, tr 3540-2.

NOV. 7

On November 7, 1974, at approximately 7:50 a. m., Silkwood reported directly to the health physics office bringing with her four urine and one fecal samples collected since November 5. Extremely

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[12] No at-work source of the contamination was found. KM does not explicitly claim that the 6th contamination "occurred" at work, only that it was "detected" at work. (p.33) Once again, however, KM's Health & Safety Mgr., Facility Mgr., and AEC investigation all concluded that the Nov. 6 contamination did not occur at the plant. Tr 4712, 7710-11, Dx 37, p.1 R.v. 18, Px 226, R.v. 13. See also tr 245-6 (concession by KM's counsel).

Despite the unexplained high nasal count, Karen was sent home without further medical attention by KM or any investigation as to a possible off-site source, tr 3500, other than the surveys of car and locker which Ms. Silkwood requested.

[13] Karen was very knowledgeable about plutonium and its biological hazards, tr 2291-2, 3063. She had attended lectures on the toxicity of plutonium, tapes of which - Px 131/1,2,3 & 4, R.v. 13 - were played to the jury. Her notebook, Px 120A R.v. 13, recorded in her own

high levels of contamination was detected in her nose and on her body, tr 4704, face and hands, tr 4704, 4707. Survey of the exterior of the urine and fecal kits showed no contamination, tr 4705, but a high level of plutonium was found inside the kits, tr 4709. [14] KM's Wayne Norwood realized that Ms. Silkwood and her kits were highly contaminated -- tr 4709, 4711 -- according to Norwood it was "a highly critical matter," tr 4966 and the source of her contamination was off-site, tr 4712. During her decontamination at the plant Karen Silkwood began to cry, tr 4714-15. KM's head of health and safety, Norwood, urged Karen to agree to an injection of DTPA, an experimental drug, but Karen was relectant and did not agree. [15] During the drive to her apartment with a KM crew, Karen was very upset at her contamination, tr 4726. Arriving at the apartment at approximately 1:30 p.m., tr 4726, Norwood and two other health physics technicians began surveying the apartment and Ms. Silkwood's roommate Sherri Ellis, tr 4728, and high contamination levels were discovered, tr 4729-30, in several rooms of the apartment,

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[13] Continued. handwriting such information as "plutonium - most toxic subst.","1,000 times more toxic than nerve gas" and "lethal dose size of pollen grain." Relevant excerpts from the notebook are included herein as Add. 3.

[14] Subsequent analysis revealed the plutonium in the kit to be insoluble i.e. not naturally excreted. Dx 37, R.v. 18. Karen Silkwood knew that insoluble plutonium could not be naturally excreted. See Add. 3 excerpt from Px 120A R.v. 8.

[15] Mr. Norwood whose degree was in poultry husbandry, tr 4937, was not medically qualified. DTPA had not been licensed by FDA for human use, was known to be ineffective against insoluble plutonium and was itself hazardous. See tr 3501-3, 5682, Px 114, R.v. 13. Dr. Gofman's medical opinion was that Karen had been wise in not submitting to the DTPA treatment, tr 826-7. See also tr 1584-5. Excerpts from Karen's notebooks show that she knew that DTPA was

Dx 37, p. 19, R.v. 18, tr 4729-30. [16] Highest contamination was found in the bathroom and on a package of cheese and bologna, Dx 37, p. 10, R.v. 18.

After ten or fifteen minutes, the team returned to the plant with Ms. Silkwood and Ellis to obtain more equipment and personnel to begin decontaminating the apartment, tr 4732-33, arriving back at aproximately 3:00 p.m., tr 4735. Norwood described Karen Silkwood as being extremely upset during the trip back to the plant, tr 4735. Gathering full protective clothing, respirators, plastic bags, and 55-gallon barrels, the team with Ms Silkwood returned to the apartment, [17] tr 4736-7. Contamination was found in the living room, the ventilation system filter, dining room as well as the bathroom, kitchen, and bedroom previously surveyed, tr 4747-8. Contaminated items were sealed in the 55-gallon barrels, tr 4742-4. [18]

As Karen sat outside the apartment as her belongings were being packed into barrels for disposal, she was approached by the Facility Manager, Morgan Moore, who described her as appearing shocked and hysterical and saying that she was dying, tr 7692. She was placed

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[15] Continued. experimental and only partially effective. See Add. 3.

[16] KM analogizes the Nov. 5 & 6 contaminations to other unexplained contaminations at the plant, (p.8), disregarding entirely the unmistakeable off-site Nov. 7 contamination and that the two earlier incidents derived from the same off-site source.

[17] KM was criticized by the AEC for its tardy response, Px 154, p.3, R.v. 13, tr 8218-20.

[18] Virtually all Ms Silkwood's personal possessions were seized and taken to the Cimarron Facility for disposal. See Px 6, R.v. 9, Px 126, R.v. 13, tr 7778. Her refrigerator, stove, t.v., sofa, carpeting were also removed, Dx 37, p.20, R.v. 18.

in a nearby automobile, questioned by a company lawyer, and required to sign a statement, tr 7693-4, Px 41, R. v. 9, Dx 81, R. v. 18. Mr. Moore asked Karen if she had brought any plutonium home, and she told him "no", tr 3753-4. KM did not provide alternate housing, Id., or medical attention, tr 7694, and Karen was observed standing on the street outside her apartment, crying, tr 1276, 3753-4.

She later phoned her mother, telling her that she had been contaminated and was coming home -- her mother described her as upset, nervous and crying. She asked if there wasn't something that could be done; Karen replied that there wasn't anything you could do for someone that received radiation, there was no cure, tr 4387.

Karen also called union representative Wodka that evening; she told him of her contamination and that she had a significant, maybe lethal, amount within her. She was quite distraught and worried about her health, had no idea whether she was going to live another day, and stated she was going to die several times. She noted that KM had not provided her with any medical attention -- only a KM lawyer who forced her into a car and demanded a statement, and that KM didn't care about her health. They were just trying to pin the blame on her. She asked Wodka to come to Oklahoma. Wodka told her to make herself unavailable to KM's lawyers since they were only trying to blame her and told her he would be in Oklahoma City the next day, tr 3735-42, tr 3798. Wodka called the AEC, demanding that it provide qualified medical care for Karen, tr 3740.

Events Following Contamination

Wodka arrived in Oklahoma City the morning of the 8th to find Karen Silkwood quite thin and pale with large circles and bags under her eyes; she seemed very depressed and quiet, tr 3742-3.

At approximately the same time, an investigation team from AEC regional headquarters and the AEC medical consultant arrived. Upon arrival, the AEC inspectors were told by KM officials that they suspected Karen Silkwood of deliberately contaminating herself to embarrass the company, tr 7589-90. A meeting between Wodka, Karen Silkwood and the AEC was arranged for the Holiday Inn, tr 3743.

While waiting for the meeting, Silkwood gave Wodka a note pad, ripped some notes out of another notebook, and told him to hold them for safekeeping. [19]

On the afternoon of the 8th, AEC investigators, Wodka and Silkwood met. The investigators discussed the events of the previous days with Ms. Silkwood, who was seriously upset, tr 6278-9. Silkwood and Ellis met with the AEC medical consultant and KM's medical consultant, Dr. Charles Sternhagen, on November 9, 1974. In a memorandum to his superior, Sternhagen reported that Silkwood and Ellis had been "handled in a way that both were quite near or in some sort of emotional breakdown", tr 7175-6; Ms. Silkwood had been crying; was aloof; uncommunicative; distraught; nervous; depressed; confused; shaking; clutching her hands together during the meeting, tr 7129-30, 7039. [20] It was decided that Ms. Silkwood

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[19] Px 276, R.v. 13 is the notebook; Px 275, contains the individual notes ripped out of it, tr 3745. The notes contained information documenting health and safety problems and possible AEC violations at KM's plant which Karen had been gathering by direction of the OCAW Union. See union background, supra. She specifically noted that the notes were not the KM incriminating documentation she had been collecting to reveal to N.Y. Times reporter Burnham; "I still have that." tr 3743.

[20] Karen was apprehensive and distrustful of Sternhagen -- KM's medical representative -- and felt he, like KM, was trying to minimize the harm to her and blame her, tr 3784-5.

would travel to Los Alamos Scientific Laboratory in New Mexico to undergo further tests as to her contamination, tr 3778. During this time, Karen called her sister, Rosemary, expressed her fears that she had no more than 5 years to live and said that she would be moving back to Texas on December 1, tr 4314.

Arriving in Los Alamos on November 10, 1974, Ms Silkwood underwent whole body and chest counting procedures. Dr. George Voelz of LASL discussed the results, minimizing the risk of harm, but noting that the lung counter could be off a factor of 3 to 5 times, tr 9337. In a private conference Karen requested, she asked Dr. Voelz and Dr. Sternhagan whether her exposure would affect her ability to have children and whether it was possible to do blood tests on the menstrual pads she had left with the lab, tr 9099-9100. Dr. Voelz told her that there would be no effect on her ability to have children and that there was no test that could be performed as she requested, tr 9100.

Karen Silkwood returned to Oklahoma City on November 12, 1974. When she reported to work on the 13th of November she was given a written work re-assignment, Px 291, R.v. 13 [21] which severely restricted her movement and required a constant escort, tr 7688-9, Px 291, R.v. 13. She participated in a union negotiating session that day that lasted until approximately 3:00 p.m., tr 7521. After the session Silkwood met with the AEC inspectors concerning her contamination at length, [22] and cried. She left at 5:00 p.m. to attend a

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[21] The area she was reassigned to was known as the "rockpile" and the reassignment was considered punitive, tr 7688-9.

[22] KM falsely claims (p. 16) that Karen refused to answer questions about the contaminated urine samples. AEC investigator Phillip testified that at that point in the interview she had to leave for her union

union strategy session, tr 6096-6101.

While at the union meeting at the Hub Cafe in Crescent, Ok., Karen spoke with Jean Jung and stated, with tears in her eyes, that she had enough plutonium inside her to kill her eventually, tr 3676,[23] and that she had her proof to give to Wodka and Burnham that night, tr 3693. She showed her a special notebook and brown manila folder, tr 3657, and said she had proof of falsification of records and samples of bad fuel welds which had been shipped, tr 3714-6. Earlier that evening Wodka and Burnham had arrived on Oklahoma City, checked into the Holiday Inn, and awaited Karen's arrival, tr 3848-9. Minutes after Karen Silkwood left the cafe at about 7:30 p.m. to meet Wodka and Burnham, she was killed in an auto accident.[24]

After her death, the AEC completed its investigation into the allegations submitted by Karen et. al on September 27 in D.C., and confirmed much of that information, Dx 38, R.v. 18, using the notes Karen left with Wodka for safeguarding on November 8. A special ERDA review team confirmed that photomicrographs of test welds on fuel rods had been touched up to obscure abnormalities or defects on the negatives in or near the critical weld areas, Dx 99, tr 7557-61, 7568-9, R.v. 18. In December, 1975, the plutonium facility closed.

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[22] con't. meeting, and agreed to resume the next morning. tr 6101

[23] Karen's anxiety and mental anguish were thus not halted by the reassurance of KM's medical consultants as KM claims, (p. 16); see also tr 4314 (Karen told her sister she was going to die "a few days before her death").

[24] To refute KM's argument that Karen had no documents which would embarrass KM (and, therefore, had to spike her urine kits to embarrass it), tr 9934, plaintiff made an offer to prove that these documents were subsequently removed by KM personnel, tr 9935-41. Upon KM's counsel's decision to forego further argument that Ms. Silkwood failed in her mission, the court refused the proffer, tr 10, 129.

STATEMENT OF THE CASE

Nature of the Case

This is a personal injury action brought by Bill M. Silkwood as Administrator of the Estate of his daughter, Karen G. Silkwood, who died on November 13, 1974. The Estate's sole beneficiaries are her three minor children. The defendants are Kerr McGee Corporation,[1] an Oklahoma-based energy conglomerate, and its wholly owned subsidiary,[2] Kerr McGee Nuclear Corporation. Jurisdiction was based on diversity of citizenship and the requisite amount in controversy under 28 U.S.C. §1332.[3] Recovery was sought for radioactive contamination damage to Ms. Silkwood's person and property on November 5, 6, & 7, 1974, and for the resultant mental anguish and emotional distress, caused by the escape of plutonium from KM's custody into Ms. Silkwood's apartment and body.

Plaintiff charged that the escape of the plutonium and the consequent foreseeable damages resulted from KM's negligence and that such negligence was part of a pattern of reckless, willful and wanton misconduct and disregard of plaintiff's rights, justifying punitive damages under 23 O.S. §9. There was evidence at trial

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[1] Hereafter cited as KMC, its nuclear subsidiary as KMNC, and the two collectively as KM. Throughout the brief, footnotes are numbered consecutively within each separate section.

[2] In post-trial motions and docketing statement KM challenged the jury's specific finding under Inst. 16 that KMNC was the mere instrumentality of KMC, reply to spec. interrog. No. 4, R. 844. There was ample evidentiary support, see e.g. tr 2494-2504, 2536-56. As this issue is not addressed in KM's brief, it is not discussed herein.

[3] Two counts of the original complaint involving different claims and defendants were dismissed before trial and are the subject of a different appeal, No. 79-1014.

that such legal malice was accompanied by actual malice toward Karen Silkwood specifically. Plaintiff also alleged that KM was strictly liable for the damages that had resulted from its "abnormally dangerous" activities.

KM's chief factual defense was that Ms. Silkwood had herself intentionally removed the plutonium from KM's facility and thereafter contaminated herself, intentionally or accidentally. KM also asserted various legal defenses including the assertion that the District Court's jurisdiction was preempted by Oklahoma's Workers' Compensation Act and by the AEC (now NRC) regulation having so occupied the field as to preclude tort recovery for damages under Oklahoma law.

At trial, the presiding judge ruled that KM's activity was, under the evidence, abnormally dangerous as a matter of law, submitting for the jury's determination the issues of whether KM's abnormally dangerous activities had caused injury to Ms. Silkwood and her property, whether KM breached its legal duty of utmost due care and whether such breach was the proximate cause of damage to Ms. Silkwood. The jury was asked to determine these issues as well as actual damages and punitive damages in the form of answers to special interrogatories. The jury found that Ms. Silkwood had not intentionally removed the plutonium herself, that KM had been grossly negligent and awarded $505,000 actual damages ($5,000 of which was the stipulated value of the contaminated property confiscated), and $10 million punitive damages.

In this appeal of the jury's verdict and the presiding judge's decision overruling its motions for judgment N.O.V. or for a new trial, KM claims the trial court abused its discretion in denying its post trial motions, and challenges the court's jurisdiction, the sufficiency of the evidence, various evidentiary and

Jury Finding of Reckless Disregard and Award of Punitive Damages

Oklahoma allows punitive damages to be imposed in cases where fraud, oppression, gross negligence, or malice are present, 23 O.S. § 9. In addition to liability from evidence of actual malice, where there is a reckless and wanton disregard of another's rights, malice and evil intent may be inferred, and punitive damages awarded. Misco Leasing, Inc. v. Keller, 490 F. 2d 545, 549 (10th Cir. 1974), White v. B.K. Trucking Co., Inc., 405 F. Supp. 1068, 1069 (W.D. Ok. 1975), Tomlinson v. Bailey, 289 P. 2d 384, 385 (Ok. 1954); Mayo Hotel Co. v. Danciger, 288 P. 309 (Ok. 1930).

Wanton conduct is conduct which exhibits a conscious indifference to consequences in circumstances where the probability of harm is reasonably apparent. Barall Food Stores, Inc. v. Bennett, 153 P. 2d 106, 110 (Ok. 1944), Foster v. Emery, 495 P. 2d 390, 392 (Ok. 1972).

Under Oklahoma law, it was proper to introduce evidence of KM's prior acts of misconduct and reckless disregard of the kind which allowed the escape of the dangerous plutonium and the consequent damages to Ms. Silkwood.

The Oklahoma Supreme Court has held:

> "Since evil intent (malice actual or presumed, is or may be an important factor in the awarding of exemplary damages; since such damages are awarded on the theory of punishment; and since when evil intent, actual or presumed, is a material element or issue in a case, similar prior acts may, with judicial approval, be admitted in evidence to establish such intent." Kurn v. Radencic, 141 P. 2d 580, 582 (Ok. 1943). See also, Pennsylvania Glass Sand Corp. of Oklahoma v. Orment, 434 P. 2d 893 (Ok. 1976); Sunray Dx Oil Co. v. Brown, 477 P. 2d 67 (Ok. 1970); Cates v. Darland, 537 P. 2d 336 (Ok. 1967); Misco Leasing Inc. v. Keller, supra; Edgar v. Fred Jones Lincoln Mercury of Oklahoma City, Inc., 524 P. 2d 162 (10th Cir. 1975).

The evidence compelled the jury's conclusion, under the court's proper statement of applicable law,[26] that KM had manifested with unmistakeable clarity its malice under the law -- its reckless disregard for the hazards of plutonium and for the rights of those endangered by its conduct - in particular the rights of Karen Silkwood.

Pattern of Conduct

KM's pattern of conduct, from the day the plutonium plant was initiated evidenced a total insensitivity to the extremely hazardous nature of plutonium and its activities and to the duty of utmost due care which the law imposed.

The evidence showed that the plant itself was poorly designed: it was cramped, tr 1146, Px 28, R. v. 11, instead of being welded, (cf tr 1142, 1163) rubber gaskets which leaked radiation were used, (tr 1141-2, 1161-3), despite the advice of a KM supervisor, tr 1141; overhead piping was poorly welded by unqualified welders, tr 2337-9; leak detection systems and alarms were not used, tr 1203, Px 28, pp. 36, 178 R. v. 11, gloveboxes, the most important containment for plutonium, were composed of poor materials and poorly designed, tr 1143-9, 2480-5; air monitoring systems to detect airborne plutonium were deficient and malfunctioned, tr 5569, 5689, 5699, 5703; Px 28 pp. 8-12, 25, R. v. 11.

A distressingly large number of contamination incidents occurred at the plant, many resulting from faulty equipment and processes and the inadequate training of workers. (See Px. 28, R. v. 11, tr 1145-6; 1189; 1262; 1464; 1787; 1796; 1841; 2288; 2296; 2340).

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[26] Inst. 10, 13, 15, 19, 20, 28, unchallenged by KM as to definition of malice.

Several specific incidents illustrate KM's reckless and callous disregard for the radiation hazards which it created for its workers and members of the public.

In March, 1973, a fire occurred which spread high levels of contamination. The AEC found that exposed workers were not wearing respirators during the waste removal procedure, as required by good practice, respirators were not readily available, and the air monitors paper had run out, so the contamination levels were not wholly known. Px 198-13, at 3, R. v. 13, Px 293, at 13-14, R. v. 13. The AEC concluded that KM's attitude about this serious incident "appeared casual", Px 198-13 at 4, R. v. 13.[27]

In another incident, improperly designed equipment twice expelled plutonium into a room, the second time seriously contaminating five people with almost 40,000 times the maximum permissible concentrations. Px 28, pp. 61-2, R. v. 11. KM was required to immediately notify the AEC, but the AEC was convinced that KM had deliberately delayed notification, tr 8200, Px 198-5, R.v. 13. The AEC noted that KM needed to be instructed that protection of people had priority over resumption of production, Px. 198-5, p. 12, R. v. 13.[28]

In 1972, two workers who had gone to breakfast in a public cafe were found to be contaminated when they returned to the plant. Px 28, pp. 102-4, R. v. 11.

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[27] After this incident, workers were made to work in respirators and the contamination was painted over.

[28] After the furor over Ms. Silkwood's contamination, KM prepared a multi-volume set of materials for public relations purposes. In vol. VII, the exposures in this incident were inexlicably reduced from 4906 MPC hours to 50, Px 261, R. v. 13, tr 5729, 8201

KM did not notify the AEC, as required, tr 8195,[29] and did not notify the restaurant or its patrons of the possible health hazard, or survey the restaurant.

KM's reckless disregard for the safety of the public was further illustrated in a series of incidents where it shipped plutonium wastes that were supposed to be solidified in liquid form, hence, prone to leak. Px 198-15, p. 3, Px 198-16, pp.3-5 , 16, 24, R. v. 13. Twice the mass liquified and contaminated the loading dock, Px 28, pp. 167-8, R. v. 11. This waste disposal problem existed since July, 1972, Px 198-16, p. 16, R. v. 13, and KM was notified that waste was arriving at the Kentucky burial site in liquid form on June, 1973, Px 198-16, p. 3-4, R. v. 13. KM was cited by the AEC for two specific shipments of waste which violated its license and 10 CFR Part 71 Px 198-16, p. 5, R. v. 13. Again, the AEC became aware of KM's cross-country shipment of defectively packaged waste only from a tip from a concerned citizen.[30]

Concealment of Cancer Risk

A willingness to expose workers to extreme hazards in a reckless, willful and wanton manner was well illustrated by KM's action with

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[29] The AEC found out about the incident 18 months later, only because of a tip from a concerned citizen who had heard of the incident from KM workers, tr 8195. Even at trial, the AEC had no idea as to the level of contamination that was in the public cafe. This episode gave the jury a glimpse of KM's indifferent attitude toward allowing dangerous radiation to escape into the public domain.

[30] KM persistently blamed its workers for problems which were its own doing, tr 7591-2, 7601-5. On one occasion, five workers were contaminated in two separate incidents 1-1/2 hours apart. KM claimed to the AEC and FBI (who were at the time investigating the contamination and death of Ms. Silkwood) that it was sabotage. Later investigation showed the cause to be a thermocouple that had never been properly connected, tr 7604, 1262-4.

regard to the risk of cancer associated with plutonium. The most significant health risk from plutonium was unquestionably the danger of lung cancer from inhalation, (tr 741-2) as KM management well knew, tr 747-50, 1730. KM's witnesses admitted that workers needed to be told about the cancer dangers, tr 9243, 5731. Plaintiff's experts stated that the cancer risk had to be clearly and emphatically communicated above all other dangers, e.g. tr 788.

The evidence clearly showed, however, that workers were not told that lung cancer was a risk, (see e.g. tr 1904, 2277, 2343).[31] The word cancer does not appear in any of the training materials used to purportedly communicate the risks to workers, see Dx 5, 6, 7, R. v. 18; tr 787, 1724, 8756. Such an omission would have to be contrived and planned, tr 1731.[32] In cross examination, the man who wrote KM's manuals in 1969 (Valentine) admitted that he had plagiarized the language from a 1959 article (px 283, R. v. 13,) but had excised the language from the article that most clearly communicated the cancer risk, tr 5813-9, Px 283, R. v. 13; Dx 5, 6, 7, R. v. 18.

The manuals instead stressed the "permissible" exposure, "acceptable" and "safe" exposure levels (e.g. Dx 5, R. v. tr 5711-3, 787-8, 791-2) and the especially misleading statement that there is no evidence of any plutonium induced cancer in humans.[33] KM's overall

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[31] One KM worker who testified learned of this danger for the first time from newspaper accounts of the trial, tr 1971.

[32] The manuals employed arcane jargon (tr 1114) which was incomprehensible to the young workers, many from rural backgrounds, who comprised KM's workforce at the plant, see e.g. 6525-7; 5736-7, 8685-94, 2289, 2471.

[33] Dx 5, R. v. 18, tr 5735-39. Plaintiff's experts had previously emphasized the misleading character of such a statement, 1679-83, 880-3, 792-5.

message to its workers was not that its plutonium activities were extremely hazardous and involved cancer dangers, but rather that KM's operation was no more risky than any other industry,[34] a gross deception, evidencing a callous disregard for the truth and for the safety of those naively endangered by KM's activities.[35]

In sum, the evidence provided a detailed portrait of KM's recklessness and its callous indifference to the hazards it created and the consequences to those it endangered. The evidence also revealed KM's recurrent proclivity to deceive - its workers, the AEC, the public, and the jury.

KM's attitudes and actions concerning the contamination of Ms. Silkwood were part of the pattern - the same recklessness, blame-shifting denial of responsibility and efforts to trivialize the harmful consequences of its actions and its true culpability.

KM's breach of its duty of care which permitted the escape of plutonium and the harm to Ms. Silkwood and her property and its less-than-diligent follow-up was more than severe enough to support an inference of legal malice under Oklahoma law. There was also evidence of evil motive, hostility, actual malice directed at Karen Silkwood, specifically.

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[34] KM's Board Chairman flatly told the workers that the nuclear industry was probably the "safest ever developed" and that KM's plant was safe, Px 16, R. v. 9. It is clear that the workers got this false message, see e.g. tr 2477.

[35] Dr. Morgan equated KM's actions to "inviting someone into a lion's cage without disclosing the presence of the lions", tr 1724. Luring workers into cancer dangers, for low wages (tr 3128) with false assurances of safety reflects an unconscionable and cruel recklessness and wantonness in relation to the terrifying cancer dangers issue. Given such deception by KM, it requires extraordinary audacity for KM to argue that its workers "assumed" the concealed risks

KM's tendency to shift the blame onto its workers was repeated with Karen Silkwood - she was immediately accused of contaminating herself, tr 3753-4, 7589-91, 3739, 6268 - originally of having deliberately eaten plutonium! Px 226, R. v. 13. KM's virulent anti-union posture[36] contributed to its callous treatment of Karen Silkwood - the belligerent assertion by the facility manager on the 6th that Karen Silkwood wasn't really injured, [37] the "treatment" by a lawyer instead of a doctor on the 7th, [38] pushing Karen Silkwood to undergo a treatment which was useless, [39] not promptly bringing its medical consultant on the scene,[40] putting her under guard at the plant on the "rockpile".[41] All of this evidence supported the jury's finding of actual malice. Judge Theis deemed the sum of the evidence ample to support a very large punitive award, Op. 591. The evidence before the jury and trial judge compelled an award of punitive damages.

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[36] e. g. Px 182, R. v. 13, 183, R. v. 13, 307, R. v. 13, tr 3127-8.

[37] Tr 7708-9.

[38] Tr 7693-4, Px 41, R. v. 9.

[39] Tr 4720-21, tr 826-7.

[40] Px 154, p. 2, R. v. 13, Dx 37, App. N. R.v. 18

[41] Px 291, R. v. 13.

VI. THE COURT'S RULINGS ON THE EFFECT OF KERR-McGEE'S PURPORTED "SUBSTANTIAL" COMPLIANCE WITH AEC REGULATIONS WERE CORRECT.

KM asserts that it "substantially" complied with AEC regulations and that such quasi-compliance should preclude findings of negligence, gross negligence and punitive damages.

The evidence was, however, that KM was not in compliance with but in violation of AEC regulations, in particular the germane regulations governing exposures of people to radiation. In addition, the law is that even if KM had fully complied with the AEC minimum standard regulations, such compliance would not preclude a finding that it was negligent.

KM Violated AEC Exposure Regulations

KM's "substantial" compliance assertion ignores the fact that evidence presented showed that KM had violated AEC regulations governing radiation exposures[1] in several respects.[2]

General Public Standards Violated

KM's claim that it complied with AEC exposure standards is in reference to the occupational exposure standards which were inapplicable to the exposure at issue here[3] which occurred in Ms. Silkwood's

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[1] KM's arguments as to the exposure standards and the fact of injury is addressed in Sec. IV supra. at p. 81.

[2] This Court must presume that the jury resolved conflicts in the evidence in our favor. Ahern v. V.A., 537 F. 2d 1098, 1100 (10th Cir. 1976).

[3] As Ms. Silkwood's off-site exposures did not occur in a restricted area, 10 CFR §§ 20.3(a)(14), nor did her contaminations occur, (even assuming arguendo, that she became contaminated when she spilled a urine sample), as part of her duties involving exposure to radiation, 10 CFR § 20.3(a)(10)(ii) thus her exposures did not constitute an occupational dose", 10 CFR § 20.3(a)(10) and the accumulated occupational dose limits were inapplicable, 10 CFR §§ 20.101(b)(2), 20.102(b), leaving the general public standards as the appropriate regulation.

apartment far away from KM's plant while she was off work. While Ms. Silkwood was off work and away from the place where KM was obliged to contain the radioactive plutonium, she was entitled to the same degree of protection against harmful exposures as any member of the public. The exposure standards for the general population are violated by exposures of only 1/10 the levels permitted for workers on the job - 4nCi to the whole body and 1.6nCi to the lung.

Ms. Silkwood's exposure - 10nCi whole body, 5nCi to the lungs by KM's numbers -- violated the general public standards by a factor of 2-1/2 times and 3 times (for whole body and lung respectively) as recognized by KM's own experts, tr 7196, 9406, and the court, Op. 583.

Occupational Standards Violated

Even if the AEC occupational exposure standards were deemed applicable, KM violated them as well. The AEC's occupational exposure recommendations are premised upon ICRP and NCRP recommendations based upon estimates of the dose delivered to the critical organs. As Dr. Karl Morgan noted, the lifetime exposure levels are calculated on the basis of the assumption that they would represent exposures accumulated over 50 years of work, tr 1638. As a corollary, the standards limit the annual dose to 2% (1/50) of the lifetime total or .8nCi to the whole body and .32nCi to the lung.[3] If an exposure exceeds these limits, the ICRP guidelines, and hence the AEC standards, have been broken, tr 1642-3. Dr. Morgan's highly qualified expert testimony was that the exposure which KM permitted Ms. Silkwood to receive substantially violated AEC regulations.[4] (tr 1584, 1648, 1737, Op. 586).

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[4] KM's Dr. Voelz agreed with this interpretation of the ICRP standard, tr 9401.

Thus, KM violated the AEC exposure standards even if its own numbers as to Ms. Silkwood's contamination levels were accepted by the jury. There was, however, evidence that the tests and measurements from which the numbers were derived - in-vivo counter and autopsy results were subject to considerable measurement errors[5] and that the actual contamination levels could have been,[6] in fact, much higher.

The data and the expert analysis presented to the jury permitted the inference that the level of plutonium contamination in the lung alone may have been as much as 27nCi, tr 9459, Px 216, pp. 14-16,R.v.13, rather than KM's 5nCi number -- considerably in violation of the broadest lung standard - the lifetime occupational lung standard of 16nCi.

Violation of As Low As Practicable Requirement

In addition to the numerical exposure standards, AEC regulations required KM to keep exposures minimized - As Low As Practicable (ALAP). This was analogous to the general duty of caution required of auto drivers in addition to compliance with posted speed limits. tr 8222 AEC Regional Director Keppler concluded with regard to KM's allowance of Ms. Silkwood's contamination, that KM had not been, in fact, dedicated to its duty to keep exposures ALAP, tr 8304, Px 154, p.2, R.v. 13. This was another KM duty of care under AEC regulation which was violated.

Pootnotes continued from preceding page.

[4] It should also be noted that Dr. Morgan who helped develop and did the original calculations for the exposure standards, now believes that based upon growing evidence of plutonium's carcinogenicity at lower exposure levels the standards as applied to plutonium need to be reduced by a factor of at least 240 times, tr 1727-8, 1750.

[5] The in-vivo counters have a measurement error of 300-500%, tr 9456, 9737. Large plutonium deposits in the body can escape detection, tr9535, 9153, 9147, 9263, 9328. The measurements depend upon extrapolations

General Lack of "Substantial" Compliance

As the court noted (Op. 586), whether KM had actually substantially" complied with AEC regulations was a fact question for the jury. The court so instructed the jury (Inst. 27) and KM has not challenged the court's definition of substantial compliance. The jury resolved this fact question against KM and there was ample evidence to support its liability conclusion. In addition to the numerous contamination incidents at the plant, Px 28, R. v. 11, passim, there was evidence that KM repeatedly violated AEC requirements with regard to inventory and accountability controls for the plutonium entrusted to it, physical security, KM's poor training, and its poor management.[7] AEC Regional Director Keppler expressed serious concerns about KM's poor inventory controls, its poor training, manpower turnovers, lack of supervision, lack of commitment to its ALAP duties, Px 154, R. v. 13, tr 8218-20. Keppler estimated that between 1970 and the closing of the plant in 1975 KM had violated AEC license or regulation requirements roughly 75 times, but had never been fined, tr 8176.[8]

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[5] Con'd. from Americium levels which are subject to separate measurement errors estimated at 50% to 300%, tr 9456-7. The autopsy numbers derived from extrapolations from fractional samples of organs, tr 9134, Dx 45, Table 4.1, R. v. 18. Although available, the entire lung and many other organs were not analyzed, tr 9643-4, 9496-8, Px 216, pp. 14-16, R. v. 13.

[6] There was a clash in the testimony of KM's Sternhagen, tr 7078, Voelz, 9575-8, and our expert, Martell, tr 1036, 1033-4.

[7] These failings have been detailed in the discussion of the evidence of KM's negligence and gross negligence, supra, pp52 to 70.

[8] In a meeting with KM management after Ms. Silkwood's contamination. Keppler criticized KM for its tardy notification to the AEC, the delay between discovery of the contamination and the survey of her apartment, the inordinate delay in obtaining bioassay results and the lack of a whole body counter at the facility, tr 8214-5. An AEC consultant had complained of the absence of a whole body counter 17 months earlier, Px 293, R. v. 13.

In view of the evidence of KM's non-compliance, KM's propositions which are predicated on substantial compliance must be disregarded, Superior Ins. Co. v. Miller, 208 F. 2d 700 (10th Cir. 1953). Even if KM had fully complied with AEC requirements, that fact would not preclude a finding of negligence.

Compliance Does Not Preclude Negligence Finding

Compliance with statutory or administrative requirements does not preclude a finding of negligence, but is merely evidence of use of due care. Transport Indemnity Company v. Page, 406 P. 2d 980, (Ok. 1965), McBroom v. Mayer, 303 P. 2d 303 (Ok. 1956), Kansas O & G Ry. Co. v. Clark, 262 P. 426 (Ok. 1903).[9] RESTATEMENT, § 288C, PROSSER, § 36 at 203.[10] KM's argument that compliance is conclusive of due care is clearly contrary to Oklahoma law. This is particularly so because the AEC requirements were explicitly recognized by the AEC itself as minimum standards, tr 8152, 8221-2, 8245.

KM and Amicus fail to provide persuasive authority for the Court to abandon this well established rule of law. As noted by the court, (Op. 579-8), STASON, ESTEP & PIERCE concur with the applicability of this general rule to the operators of nuclear facilities. KM's sole

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[9] See also Nader v. Allegheny Airlines, 426 U.S. at 308 n. 19, (mere compliance with CAB regulations no bar to liability in common law fraudulent misrepresentation action).

[10] Amicus, (16-17), quotes PROSSER from the same page, omitting his following comment that: "But if there are unusual circumstances or increased danger beyond the minimum which the statute was designed to protect, it may be found that there is negligence in not doing more." (p. 204).

citation is to Heck v. Beryllium Corp., 226 A. 2d 87 (Pa. 1966)[11] which clearly falls within the line of Oklahoma cases, the RESTATEMENT and PROSSER.

Amicus is palpably in error when it argues that the AEC regulations define the full duty of KM since the contamination of Karen Silkwood was "precisely of the type contemplated by the regulations." (p.17) This assertion is directly contradicted by competent evidence before the jury, and was carefully examined by the trial judge before overruling KM's post-trial motions.

Amicus has advanced no persuasive authority why the widely recognized tort rule expressed by Oklahoma cases, the RESTATEMENT, PROSSER and other authorities should be discarded solely for the nuclear industry. This rule has been uniformly applied to products and activities of defendants in a wide variety of federally-regulated enterprises[12] - nothing in the AEC regulations and interpretations, Congressional legislative history, scholarly opinion or case law supports the extreme and unprecedented position espoused.

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[11] Had defendant there known then that its beryllium emissions were harmful ("where a reasonable man would take additional precautions") mere compliance would have been insufficient.

[12] See discussion of the "substantial" compliance argument in Sec. II, supra, at notes 15-22 and accompanying text.

APPENDIX
Volume IV

In the
UNITED STATES COURT OF APPEALS
For the Tenth Circuit

No. 79-1894

BILL M. SILKWOOD, Administrator of the Estate of Karen G. Silkwood, deceased,

Appellee,

v.

KERR-McGEE CORPORATION, a Delaware corporation, and KERR-McGEE NUCLEAR CORPORATION, a Delaware corporation,

Appellants.

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF OKLAHOMA

November, 1980

THE JOURNAL RECORD PUBLISHING CO., 401 N. ROBINSON, OKLAHOMA CITY, PH. 235-3100

was the autopsy information, which indicated no evidence of cancer under the microscope, which is the usual way by which we identify the presence of cancer. There were other pieces of information, including the level of exposure, which is comparable to a group of patients that have been followed by other investigators in terms of plutonium exposure, the fact that they had not developed cancer at similar dose levels. And the fact that exposure to carcinogenic agents does not necessarily mean that a particular damage to cell will result in a cancer cell, because we know, for instance, that ultraviolet light is very carcinogenic, yet every woman that goes out for a suntan doesn't get skin cancer. So that there is a statistical chance of developing cancer based on the damage that is done by any carcinogenic agent. And that was the basis for my testimony.

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[8152]

JAMES KEPPLER DIRECT EXAMINATION

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Q. Before I further pursue these written reports, I would like to ak you another qestion about the nature of the inspection. Do your inspectors, your staff, do they limit their investigation and their inspection only to items that are listed in the license, that is, license conditions, and only to items in the regulations?

A. No, The framework of the inspection program is largely built around the regulations, but I think that – our experience is that it is not equating compliance to safety – it is not a 100 percent guarantee, if you will. Our experience is that licenses are deficient in certain areas. It is very hard to foresee all the conditions that may exist that you might want a license condition to touch on. What we try to do is – our pec-

ple are very experienced – they have generally a pretty broad background in the industry – and we look for them to go out an visually eyeball the facility, observe work in progress, to see if there are conditions that exist that they feel should be corrected and dealt with. If there are, we bring these to the licensee's attention, and usually try to resolve a course of action on it. If we feel strong about the issue, we'll bring the matter to the attention of this licensing and get a license condition put on it, if that is necessary.

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[8170]

JAMES KEPPLER CROSS EXAMINATION

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Q. What other things did you do – I mean, what other areas of regulation did you undertake at that time, besides the existing power facilities of a dozen or more, 24 in construction. The Kerr-McGee facility. What else?

A. We had about 3,000 by-product materials, licenses to inspect, and we had a number of roughly 15, what we call

[8171]

"research and training-type reactors" at universities, and so forth.

Q. Would if be fair to say – What was that last statement? Fifteen what?

A. Research and training-type reactors at universities.

Q. All over, or just in your area?

A. Just in my area.

Q. Would it be fair to say that in the years 1973 and 1974 you were indeed a busy young man?

A. I think so.

Q. And you not only were a busy young man, but had the huge, almost gargantuan, unbelievable responsi-

bility of the safety of the public in your area, did you not?

A. I wasn't doing it myself, sir.

Q. I understand, but you were the top dog?

A. Yes, sir.

Q. Strike the word "dog." You were the top puppy.

MR. PAUL: Well, your Honor, –

MR. SPENCE: Strike "puppy."

Q. (By Mr. Spence) You were the top man.

MR. PAUL: He is not a puppy.

A. I was the top man; yes sir.

MR. SPENCE: Thank you very much.

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[8176]

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Q. Now, can you tell the ladies and gentlemen of the jury the number of citations – citations – that were issued against Kerr-McGee from the commencement of this operation until its conclusion?

A. I can not tell them exactly; no.

Q. Did you review the files so that you could get a general oversight of the operation of this company prior to the time that you came to testify?

A. Yes.

Q. Can you give me an approximation of the number of citations that Kerr-McGee was issued during the period of 1970 until it closed its plant in 1975?

A. By guess the number would be somewhere in the vicinity of 75.

Q. Seventy-five violations. Now, a citation means that you – Let's talk about what a citation is. A citation is something that says you have violated a regulation, isn't it?

A. Yes.

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[8179]

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Q. (By Mr. Spence) Now, the problem, of course, that existed all during the period of this plant up until the time of and through and including Karen Silkwood's death, was that this was being regulated – and that is atomic energy, nuclear energy, the use of nuclear materials – were being both promoted and regulated by a single agency; namely the AEC, isn't that true?

A. That is true.

Q. And so here was the agency sort of in conflict with itself. On the one side it was attempting to promote nuclear energy, and on the other side it was trying to regulate and to negatively criticize and to lean on and to control the people that were trying to promote, and that caused problems, didn't it?

A. Yes, sir.

Q. And it has been referred to as the "fox and the chicken house syndrome," or the syndrome of "Dracula in charge of the blood bank," –

MR. PAUL: Well, your Honor, now this is –

THE COURT: Well, sustained.

MR. PAUL: – most improper, and I object to it.

THE COURT: I think those are arguments –

MR. PAUL: I ask that you admonish counsel about making such references.

MR. SPENCE: Well, I withdraw "Dracula." We have talked about the "fox" many times.

[8180]

THE COURT: Well, I understand, and I think the least appellations that are given – because – if there is something in common parlance, that's fine – I think "fox and the chickens" is widely understood, but the use of appellations, I think is –

Q. (By Mr. Spence) All right. So, now, relative to

the fox and the chicken syndrome, which is in general use – which the Court and I feel more comfortable with –

MR. PAUL: Well, your Honor, didn't you just tell him not to do that?

MR. SPENCE: I thought you said it was in general use, judge.

THE COURT: Well, I said it was in more general use, but any appellation is improper. I don't want to rob you of your style, but that is your appellation to it – not the witness'.

MR. SPENCE: All right, judge.

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[8184]

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A. The inspection, after the Silkwood contamination incident, consisted of some of the same inspectors, and some different inspectors.

Q. I said that they stayed at a different motel, didn't they?

A. We were instructed to stay at different motels.

Q. And who instructed you to do that?

A. Our headquarters.

Q. Who was that?

A. Mr. John Davis.

Q. And Mr. Shelley was – was it Shelley – no, it was Mr. Moore – Mr. Moore, Morgan Moore, late last week said that he felt that from his standpoint almost all, at least almost all of your inspections were unannounced – to him they were announced. Do you agree with that?

A. I think the majority of the inspections were unannounced; yes.

Q. Well, if the majority of the – And, so what you're saying is that the general inspections, where you came in to check the safety of the plant, were un-

announced. The other kind of situations were where you came in and sat down with Mr. McGee, or other officials, to discuss matters, isn't that true?

A. Or there may be some specific reasons to want to observe

[8185]

a test, or –

Q. For which you would ask them to set it up so you could see it?

A. That is correct.

Q. One of those would be to observe the test where they were testing the hole-up in the pipes – that would be an example?

A. An example; yes.

Q. But the rest of them, the basic inspections out there, were unannounced, weren't they?

A. Yes, sir.

Q. Now, if it appears from the testimony, from the preponderance of the evidence in this case, that even the people in management believed that most of the inspections were announced, would that cause you to be concerned about whether or not people in Kerr-McGee were being tipped-off?

MR. PAUL: Just a moment, Mr. Keppler. I object to the form of the question. There is no such evidence in this record.

MR. SPENCE: I believe that witness-after-witness – it has been brought out here under the direct examinations of Mr. Paul – has talked about the majority of those inspections being known to them and announced inspections.

[8186]

MR. PAUL: That is just not true, your Honor.

MR. SPENCE: That is the way I heard the testimony.

MR. PAUL: No, your Honor.

THE COURT: I think there's a big debate on that. It is my recollection that it is somewhat different. You may – you have had some admissions – you had your plant people that indicated there was none, but most of them indicated they didn't have knowledge they were coming, I think.

MR. PAUL: That is correct.

MR. SPENCE: Mr. Smith testified, I believe, that all of them were known. And witness-after-witness, who has taken the stand in management –

THE COURT: You're debating the evidence.

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[8187]

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Q. (By Mr. Spence) Aren't you aware of the fact, Mr. Keppler, Do you know Mr. Pittman?

A. Who?

Q. Mr. Frank Pittman, in the AEC?

A. No, I don't.

Q. I take it, then that you are not aware of his relationship with Kerr-McGee?

A. I am not.

[8188]

Q. Are you aware of what is known as the "revolving-door syndrome"?

A. No.

MR. PAUL: Well, you Honor, object to the –

MR. SPENCE: He says he's not aware of it.

MR. PAUL: Well, I object.

THE COURT: Sustained. Again those are –

Q. (By Mr. Spence) Are you aware of the in-and-out syndrome of government where people work in government and then come out of government?

THE COURT: That is better.

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[8195]

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Q. Do you think they should have reported it when there is a restaurant involved?

A. I think that in my judgment the matter should have been reported, but there was not a regulatory requirement at that time.

Q. So you're saying that – Is there now?

A. I don't think there is now, either, under the circumstances but again my comment would stand – we would have expected to have been informed of any contamination out in the public domain.

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[8199]

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Q. To put it in perspective, then you're saying that by the time you took over you felt that there had been enough going on in this Kerr-McGee facility that somehow the matter should have been dealt with more severely and directly before you got there?

A. I think that is correct.

Q. Now that the jury can understand your grade – which by the way this is a grade of "C", isn't it – you gave for Kerr-McGee about a "C" in this area?

A. That would be my personal assessment of it; yes. We don't have a formalized grading system, but that would be the way I would have graded them.

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Q. (By Mr. Spence) But, in 1971, your report states – and by "your" I don't mean you directly – but the AEC – that's your outfit?

[8214]

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Q. Yes. There was a meeting that occurred that is a part of the same report in which you do appear, isn't that true?

A. Yes.

Q. And there were a number of items discussed, weren't there?

A. There were basically three meetings; yes.

Q. And among the items discussed were these – let's just read them together: One, there was criticisms about the notification and availability of the company's medical expert. That is a criticism that you levied, isn't it?

A. These are criticisms we levied; yes.

Q. There were six hours between the finding of contamination on Ms. Silkwood and the initial survey of her apartment?

A. That was a concern.

Q. There was an inordinate delay getting bioassay results from U.S. Testing.

A. That is correct.

Q. "Inordinate" means way to long, doesn't it?

A. Much longer than we thought should be.

Q. "Facilities are not available for prompt whole body counting." Did you think that should be?

A. Yes, we did.

[8215]

Q. Why do you think facilities for whole body counting should have been at the Kerr-McGee facility?

A. Because it was our view that for an operation of this type, involving plutonium, that one should be there.

Q. For the health and safety of the workers?

A. Yes.

Q. And the incident clearly indicates that small, but biologically significant, quantities of plutonium can get out of the plant. Isn't that true?

A. That is correct.

Q. And a "biologically significant amount of plutonium" would be the amount of plutonium that could cause any single human being to get his full body burden in one dose, wouldn't that be true?

A. Well, –

Q. For example, do you think 5/10ths of a gram is biologically significant?

A. I don't know that.

MR. PAUL: Your Honor, I object to opening up this line. It is beyond the scope.

THE COURT: He said he didn't know, so that forecloses him.

Q. (By Mr. Spence) Anyway, those were criticisms that were made to Mr. McGee, weren't they?

A. And to his staff.

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[8218]

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Q. That is what the statement says, isn't it?

A. My statement to Mr. McGee was that based on the events that were happening at the plant that it was apparent to me that I could see no evidence that Kerr-McGee management was on top of the operation.

Q. Yes. And then you said you were very concerned that Kerr-McGee management are not committed to ALAP – What is that?

A. "As low as practical."

Q. – on exposures, and have not replaced profes-

sional health physicists lost several years ago. You said that, didn't you?

A. That is correct.

Q. And contamination incidents get short shrift if no limits are exceeded, don't they?

A. That is correct.

Q. Then you stated to Mr. McGee that the equipment used in the plant is archaic, and prone to break down, didn't you?

A. I said that.

Q. Or enhance contamination problems, for example in the slot boxes?

A. I made that statement.

Q. Yes. And you stated that the large number of procedural

[8219]

errors is the result of one of more of the following: First, personnel turnover, isn't that right?

A. A list of personnel turnover, training –

Q. Inadequate – Wait a minute. Let's not skip through it. What kind of training?

A. Inadequate.

Q. Inadequate training. And, what kind of supervision?

A. Or lack of supervision.

Q. Lack of supervision. And then you said the Pu hold-up problem – That is the matter of the plutonium in the pipes, wasn't it?

A. That is correct.

Q. – has not received attention from the proper level of Kerr-McGee management, is that right?

A. Yes.

Q. What level should that receive attention from, in your judgment?

A. The coporate management, without the finding

of the level – I think somebody in a decision-making process should have been on top of that.

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[8220]

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Q. (By Mr. Spence) I want to talk about this word "ALAP". I don't believe the jury has heard about it yet. What does that stand for?

A. As low as practical.

Q. As low as practical. What does it refer to?

A. Personal exposures.

Q. Of who – of people working at the plant?

A. Yes.

Q. Human beings there?

A. Yes.

Q. Would you tell me whether or not it is your position at the AEC that that is the ultimate standard that must be applied to every facility?

A. The problem, Mr. Spence, is that that was established as a regulatory objective, without any teeth.

Q. That is right.

A. It was a regulatory guide that all utilities, or all

[8221]

licensees, should attempt to keep exposures as low as practical without –

Q. Should?

A. Should.

Q. Should attempt?

A. Without defining what that means.

Q. All right. So what you're saying is – and let's make this clear so that the ladies and gentlemen of the jury can clearly understand it – when we talk about "permissible levels of exposure," that is one thing – that is a minimum standard, is it not?

A. The regulations contain requirements which licensees must adhere to.

Q. Yes.

A. Those are the maximum permissible levels of radiation.

Q. That is as far as they can go.

A. That is correct.

Q. That doesn't mean that you don't want them to try to get under that "as low as practical," isn't that true?

A. That is correct.

Q. And so you leave that to the judgment, sometimes, of the licensee – if he thinks the situation calls for more care, you expect him to use more care, don't you?

A. Yes.

Q. And so when we talk about standards, those are minimum

[8222]

standards that everybody must adhere to – they do not reflect the most care that should be given, but the minimum care that should be given, isn't that true?

A. Yes.

Q. And, again, to make that clearly understood, it is again like driving through a school zone, the minimum standard of which is a 20-mile an hour zone, but if it is slippery, and wet, icy, and there are a lot of kids, they might have to drive slower – that is what we're talking about, isn't it?

A. Basically; yes.

Q. Thank you. And that is what "as low as practical" means – as we have discussed it.

A. Yes.

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[8224]

Q. Now, when we are talking about the use of plu-

tonium – and Kerr-McGee was using plutonium, were they not?

A. Yes.

Q. – we're talking about the use of the most dangerous element known to man, are we not?

A. I don't know the answer to that question.

Q. Well, it is because I used the word "most," isn't it?

A. Yes. It is a highly toxicant and dangerous material.

Q. You know it is – Would it be fair to say that it is frightenly toxic – that small amount, evenly distributed, as low as half a gram, that much (indicating), half a gram, could, if evenly distributed, give the maximum lung burden to millions of people – that is why we are concerned about it, isn't it?

A. Yes.

Q. And if we're talking about a pound of it evenly distributed, it could give the maximum lung burden to practically the whole world and so –

MR. PAUL: Your Honor, I object to this line of interrogation. It is highly speculative and –

MR. SPENCE: It is illustrative.

MR. PAUL: The "evenly distributed" part is nonreality, and it is just an improper line.

THE COURT: Well, after you have gone into it – it is toxic – I think the amounts – I will sustain

[8225]

the objection. We heard the witness yesterday – but then we've heard from some of the plaintiff's witnesses – so they're not – the jury is familiar with it, to begin with.

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[8228]

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Q. I think you have been misled. The evidence in

this case is undisputed that the only certified HP was Mr. Valentine.

Now, I like you to help me find the evidence that you just mentioned, because that will be interesting to me. Where could I look for that?

A. It seemed to me that that evidence was provided in response to a question by Mr. Stockton of the Dingell Committee.

Q. Who would have provided that information?

A. I think my staff did.

Q. So who would have given it to your staff?

A. I believe that is information that they obtained through a review of the files of Kerr-McGee, or a review of the records of the employment of Kerr-McGee.

MR. SPENCE: Now, I don't think there is the slightest question but what I said is true, and I'm going to just now ask you if there is any question about that, Mr. Paul.

MR. PAUL: Well, I think the question has to do with definitions, and I believe I can clear it up for you, but we must go the bench.

MR. SPENCE: All right.

[8229]

(At the bench.)

MR. PAUL: Based on my interview with the witness, your Honor, I would say that his reference is to the Health Physics Society, and active membership in the Health Physics Society, and that he's answering the question based on that information –

THE COURT: I see.

MR. SPENCE: Okay. I understand.

MR. PAUL: I think that's the problem.

(In open court.)

Q. (By Mr. Spencer) Don't you know the difference between somebody who is a member of the Health Physics Society and a Certified Health Physicists?

A. I guess I don't.

Q. Somebody who is a member of the Health Physics Society just has to pay a $3 dues, whereas somebody who is a Certified Health Physicists is somebody who is certified by a Board, and takes a test.?

MR. PAUL: Well, your Honor, I object to the form of that question. There has been no evidence to that effect.

THE COURT: Well, I will sustain the objection. I don't know as anybody has said there was a $3 dues. We know what a Certified Health Physicists is, but we

[8230]

don't know what the corollary is.

Q. (By Mr. Spence) Weren't you aware of the fact that the only certified health physicists in the plant was Mr. Valentine, who left if 1972 – didn't you know that until I just told you that now?

A. No.

Q. And you didn't know, until I just told you, the difference between somebody who is merely a member of a society – like Mr. Norwood was a member of the Health Physics Society, and gets the monthly publication, and that sort of thing – and somebody who has been tested and certified to on the other hand – you didn't know that difference?

A. I wasn't involved to that degree.

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[8245]

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Q. And when you find a plant where workers are not cooperative, or seem to be unconcerned about their health, that may indicate they are not getting the correct training, isn't that true?

A. That may be a symptom; yes.

Q. And that was one of the things you were reporting directly to Mr. McGee, wasn't it?

A. It was one of the issues I expressed concern about.

Q. Thank you. Now, I hear you accurately – I wrote it down – but I want to make sure – that when you say that – when you say that compliance with the conditions of the license by the licensee is no guarantee of safety – you did say that?

A. That is correct.

Q. The other side of that is also true, is it not, that when you see violations of the license, it may be evidence of an hazardous operation?

A. It could be.

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JAMES KEPPLER RECROSS EXAMINATION

[8304]

Q. Okay. Now, that is the meeting that Mr. Paul was talking to you about on redirect a few minutes ago and asked you whether or not Kerr-McGee agreed with that – these conclusions – about all of their failures, all of the problems, all of the objections that you have made, and which we have gone over with the jury over-and-over again, and what is the comment at the bottom that Mr. Paul did not read to the jury?

A. (Reading) "The Kerr-McGee representatives expressed no disagreement with any of the material presented."

Q. And the people that you are referring to that say that "Kerr-McGee representatives expressed no disagreement with any of the material presented," were the people you have just mentioned, who have testified before the jury; Mr. Zitting, Mr. Dunn, Mr. Moore, Mr. D.A. McGee, is that correct?

A. Yes. Could I make a comment?

Q. Yes, of course.

A. I think the impression that I had during the meeting – there were no comments made on anything – I think the position being taken by the company at that time was to hear the findings presented. They commented on nothing in either of the two meetings.

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